

REMARKS

Prior to entry of the claim amendments presented above, claims 1-9, 11-16, 18-37, and 41-46 were pending in the application. All claims stand rejected. In the present amendment, claims 42, 43 and 46 have been canceled, claim 1, 4, 13 and 41 have been amended and new claim 47 has been added. Accordingly, with entry of this amendment, claims 1-9, 11-16, 18-37, 41, 44, 45, and 47 are pending. The cancellation of claims is made herein without prejudice or disclaimer of the subject matter recited therein, and applicants expressly reserve all rights to such subject matter. Applicants' representative Matthew Mulkeen wishes to thank Examiner Coleman for the courtesies extended during the January 17, 2002 telephone interview, during which ways to overcome the rejections for indefiniteness and obviousness were discussed.

Improper Markush Group Rejection

Claims 42 and 43 are rejected for being drawn to an improper Markush group. This rejection has been rendered moot by the deletion of these claims.

Section 112 Rejection for Lack of Enablement

Claims 19-37 and 46 are rejected for lack of enablement for recitation of the term "preventing." Applicants have deleted claim 46, rendering this rejection moot. Pending claims 19-37 do not recite this term. For the Examiner's convenience, a complete set of the currently pending claims is attached hereto beginning from page 30.

Section 112 Rejection for Lack of Written Description

Claims 1-9, 11-16, 19-37 and 41-46 have been rejected under 35 USC § 112, ¶ 1, for lack of written description. In order to expedite prosecution, the moiety “trihalomethane-carbonyl” has been deleted from the definition of R⁴, R⁵, R⁶, R⁷, R⁸, R⁹, and R¹⁰ of claim thereby obviating this rejection. This moiety, however, in positions R⁴, R⁵, R⁶, R⁷, R⁸, R⁹, and R¹⁰, is covered by the chemical structure -C(=O)-R” for carbonyl and this structure remains in the claims. As defined at page 12, R” includes alkyl, which is defined expressly at page 9 to include substitution with trihalomethane. Therefore, although the term has been removed from the above-specified positions, applicants believe that the claims continue to encompass trihalomethane carbonyl.

Section 112 Rejections for Indefiniteness

Claims 1-9, 11-16, 19-37 and 41-46 have been rejected under 35 USC § 112, ¶ 1, for indefiniteness. These rejections are addressed as follows.

Paragraphs a, b, d, e, g, i, o, and r

The Examiner had rejected various claims as containing moieties that are indefinite. Although applicants contend that these terms are clearly defined in the specification, in order to expedite prosecution, applicants have responded by amending the claims to recite these moieties by structure rather than name. Accordingly, these rejections have been rendered moot.

Paragraph c

The typographical error “five-six-member” has been changed to “five or six membered.”

Paragraph f

Applicants traverse this rejection and request its withdrawal. As discussed during the telephonic interview with the Examiner, MPEP § 2173.05(o), states that “[t]he mere fact that a compound may be embraced by more than one member of a Markush group recited in the claim does not lead to any uncertainty as to the scope of the claim for either examination or infringement purpose.” Moreover, MPEP § 2173.05(h) provides the following example of an acceptable Markush group: “selected from the group consisting of amino, halogen, nitro, chloro and alkyl,” and states this is acceptable “even though ‘halogen’ is generic to ‘chloro.’”

Paragraph h

The typographical error “R2” has been changed to “R².”

Paragraph i

The term “C-carboxy” has been replaced with its corresponding structure, rendering this objection moot.

Paragraph k

This term has been removed.

Paragraph l

This rejection is traversed for the following reasons. During the telephone interview, the Examiner stated that this rejection was prompted by the new utility guidelines and specifically compared the pending claims to Example 8 “Therapeutics Not Associated with a Disease.” In this example, compound A is disclosed to inhibit tyrosine kinase enzyme XYZ and the specification states that compound A can be used to treat diseases caused or exacerbated by enzyme XYZ; however, *no actual diseases are mentioned*. Example 8 further states that the method claims would be allowable if applicant provides a reference that teaches certain diseases are associated with increased activity of enzyme XYZ.

The hypothetical fact pattern of Example 8 is not analogous to applicants’ situation because applicants have provided an extensive listing of exemplary diseases treatable with compounds of the present invention. For example, in the first full paragraph of page 4, applicants expressly mention cancer, psoriasis, hepatic cirrhosis, diabetes, atherosclerosis, angiogenesis and renal disorders. The nexus between modulating protein tyrosine kinase and treating a protein tyrosine kinase related disorder is described at pages 2-5 and 27-32 of the specification and further supported by the working examples of pages 56-109. Moreover, claim 20 is directed to the modulation of the catalytic activity of a protein tyrosine kinase and therefore this rejection is not applicable to this claim. Accordingly, applicants submit that they have met the statutory requirement of 35 USC § 112 and request the withdrawal of this rejection.

Paragraphs m and n

This typographical error has been corrected.

Paragraph p

For the definition of R¹¹, the “and” before trihalomethanesulfonyl has been deleted.

Paragraph q

The term “when-B” has been amended to “when B.”

Paragraph s

Claim 42 has been cancelled.

Paragraphs t-ba

Claims 42 and 43 have been cancelled. Applicants note that in new claim 47 none of the species have a ring that is fused with the five-membered ring in the R³-R⁶ positions. Any ring structure joined to bonds R³-R⁶ is joined by a single covalent bond at one of these positions.

Section 103 Rejections for Obviousness

Claims 41-45 are rejected over Buzzeti for obviousness. This rejection is traversed. Applicants urge that the Examiner has failed to demonstrate how the genus of Buzzeti could suggest the present claims. In the A position, Buzzeti discloses only a 6 membered phenyl ring or 9 or 10 membered heterocyclic or nonheterocyclic bicyclic rings: naphthalene, tetrahydronaphthalene, quinoline, isoquinoline, indole and 7-azaindole. This does not suggest the invention of claims 41-45, which are directed to synthesizing the compounds of claim 1, which in contrast to Buzzeti, recites a 5 membered heterocyclic ring at the A position. Furthermore, *In re Ochiai*, 71 F.3d 1565, 37 USPQ2d 1127 (Fed. Cir. 1995), stands for the proposition that a method of making a new and nonobvious product cannot be obvious. Applicants note that the claimed compounds are not obvious in light of Buzzeti and therefore submit as a matter of law these rejections are improper. Accordingly, withdrawal of these rejections is requested.

Claims 1-9, 11-16, 18-37 and 41-46 are rejected for being unpatentable over Tang, U.S. Patent No. 6,147,106. Without addressing the merits of this rejection, applicants contend that this rejection is improper, as Tang is not prior art by virtue of 35 USC § 103(c). As explained in MPEP § 804.03, Section 103(c) disqualifies prior art that qualifies only under Subsections (e), (f), and (g) of Section 102, if the invention was owned by the same entity or subject to an obligation of assignment to the same entity, for applications filed on or after November 29, 1999. By virtue of the CPA, the present application was filed on September 18, 2000. Moreover, the present invention was owned by the same entity or subject to an obligation of assignment to the same entity. Accordingly, Tang is disqualified from being prior art by 35 USC § 103(c) and withdrawal of this rejection is respectfully requested.

CONCLUSION

In view of the above remarks and amendments, it is respectfully submitted that this application is in condition for allowance. Early notice to that effect is earnestly solicited. The Examiner is invited to telephone the undersigned at the number listed below if the Examiner believes this would be helpful in advancing the application to issue.

Respectfully submitted,



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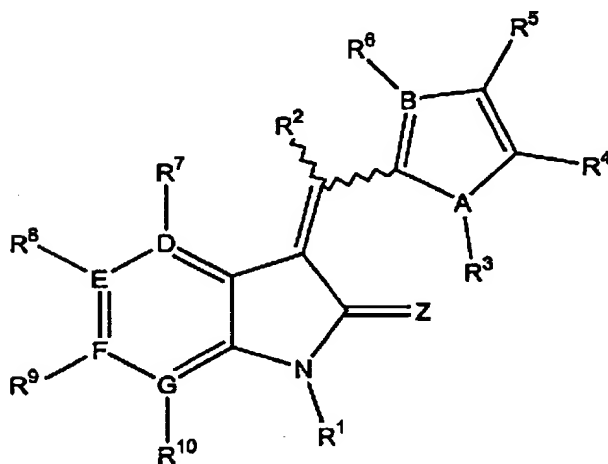
January 22, 2002
Date

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Marked-Up Version of the Amended Claims

1. (Four times amended) An azaindole compound having the following chemical structure:



wherein,

A is selected from the group consisting of nitrogen, oxygen and sulfur and it is understood that when A is oxygen or sulfur, R³ does not exist and there is no bond;

B, D, E, F and G are independently selected from the group consisting of carbon and nitrogen wherein only one of D, E, F and G is nitrogen and the other of D, E, F, and G are carbon, and it is understood that when B, D, E, F or G is nitrogen, R⁶, R⁷, R⁸, R⁹ and R¹⁰, respectively, do not exist and there is no bond;

Z is selected from the group consisting of oxygen, sulfur and NR¹¹ wherein, R¹¹ is selected from the group consisting of hydrogen, alkyl, cycloalkyl, aryl, hydroxy, alkoxy, aryloxy, ~~[carbonyl], -C(=O)-R'', -C(=O)O-R'', R''C(=O)O-, -S(=O)₂R'', -C(=O)NR¹²R¹³, [and] R¹²R¹³NC(=N)-, and trihalomethanesulfonyl; [wherein R'' is selected from the group consisting of hydrogen, alkyl, cycloalkyl, aryl, heteroaryl (bonded through a ring carbon) and heteroalicyclic (bonded through a ring carbon), and wherein R¹² and R¹³ are independently selected from the group consisting of hydrogen, alkyl, cycloalkyl, aryl, carbonyl, and combined, a five six member heterocyclic ring containing at least one nitrogen and trihalomethanesulfonyl;]~~

R^1 is selected from the group consisting of hydrogen, alkyl, cycloalkyl, aryl, heteroaryl, heteroalicyclic, hydroxy, alkoxy, trihalomethanecarbonyl, trihalomethanesulfonyl, $-C(=O)O-R''$, $R''C(=O)O-$, $-S(=O)_2R''$, $-C(=O)NR^{12}R^{13}$, and $R^{12}R^{13}NC(=N)-$; ~~[wherein~~

~~[R'' is selected from the group consisting of hydrogen, alkyl, cycloalkyl, aryl, heteroaryl (bonded through a ring carbon) and heteroalicyclic (bonded through a ring carbon), $-C(=O)NR^{12}R^{13}$, and $R^{12}R^{13}NC(=N)-$ wherein]~~

~~[R^{12} and R^{13} are independently selected from the group consisting of hydrogen, alkyl, cycloalkyl, aryl, carbonyl, sulfonyl and combined, a five six member heterocyclic ring containing at least one nitrogen;]~~

R^2 is selected from the group consisting of hydrogen, alkyl, cycloalkyl, aryl and halogen;

when A is nitrogen, R^3 is selected from the group consisting of hydrogen, alkyl, cycloalkyl, aryl, hydroxy, alkoxy, aryloxy, ~~[carbonyl,]~~ $-C(=O)-R''$, $-C(=O)O-R''$, trihalomethanesulfonyl, $R''C(=O)O-$, $-S(=O)_2R''$, $-C(=O)NR^{12}R^{13}$, and $R^{12}R^{13}NC(=N)-$; ~~[, wherein R'' is selected from the group consisting of hydrogen, alkyl, cycloalkyl, aryl, heteroaryl (bonded through a ring carbon) and heteroalicyclic (bonded through a ring carbon), and wherein R^{12} and R^{13} are independently selected from the group consisting of hydrogen, alkyl, cycloalkyl, aryl, carbonyl, sulfonyl and combined, a five six member heterocyclic ring containing at least one nitrogen and trihalomethanesulfonyl;]~~

R^4 , R^5 , R^6 , R^7 , R^8 , R^9 and R^{10} are independently selected from the group consisting of hydrogen, alkyl, trihaloalkyl, cycloalkyl, alkenyl, alkynyl, aryl, heteroaryl, heteroalicyclic, hydroxy, alkoxy, aryloxy, thiohydroxy, thioalkoxy, $-R^{12}NC(=N)NR^{13}R^{14}$, thioaryloxy, ~~[sulfinyl, S-sulfonamido, N-Sulfonamido,]~~ $-S(=O)R''$, $-S(=O)_2NR^{12}R^{13}$, $R^{12}S(=O)_2NR^{13}-$, trihalomethanesulfonyl, $-C(=O)-R''$, ~~[trihalomethane-carbonyl,]~~ ~~[carbonyl,]~~ $-C(=O)O-R''$, $R''C(=O)O-$, $-S(=O)_2R''$, $-C(=O)NR^{12}R^{13}$, cyano, nitro, halo, amino, $-OC(=O)NR^{12}R^{13}$, $R^{12}OC(=O)NR^{13}-$, $-OC(=S)NR^{12}R^{13}$, $R^{12}OC(=S)NR^{13}-$, $R^{12}R^{13}NC(=N)-$, $-NR^{12}C(=O)R^{13}R^{14}$, $R^{12}C(=O)NR^{13}-$, and $-NR^{12}R^{13}$;

wherein R'' is selected from the group consisting of hydrogen, alkyl, cycloalkyl, aryl, heteroaryl (bonded through a ring carbon) and heteroalicyclic (bonded through a ring carbon); ~~[, $-C(=O)NR^{12}R^{13}$, and $R^{12}R^{13}NC(=N)-$ wherein]~~

and wherein R^{12} , ~~[and]~~ R^{13} , and R^{14} are independently selected from the group consisting of hydrogen, alkyl, cycloalkyl, aryl, ~~[carbonyl, sulfonyl]~~ $-C(=O)-R''$, $-S(=O)_2R''$, and combined, a ~~[five-six-member]~~ five or six membered heterocyclic ring containing at least one nitrogen; ~~[-cyano, nitro, halo, O-carbamyl, N-carbamyl, O-thiocarbamyl, N-thiocarbamyl, guanyl, guanidino, ureido, amino, $OC(=O)NR^{12}R^{13}$, $R^{12}OC(=O)NR^{13}$, $OC(=S)NR^{12}R^{13}$, $R^{12}OC(=S)NR^{13}$, $R^{12}R^{13}NC(=N)$, $R^{12}R^{13}NC(=N)NR^{13}R^{14}$, $NR^{12}C(=O)N^{13}N^{14}$, and $NR^{12}R^{13}$, wherein R^{12} and R^{13} are independently selected from the group consisting of hydrogen, alkyl, cycloalkyl, aryl, carbonyl, sulfonyl and, combined, a five or six member heterocyclic ring containing at least one nitrogen; and,]~~

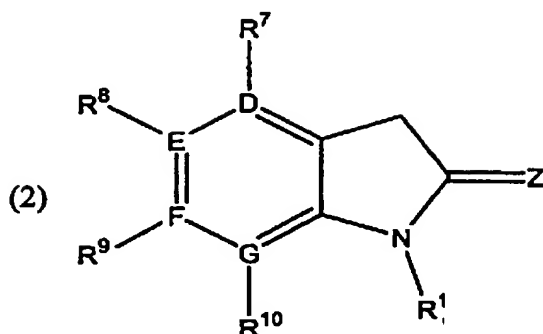
and the physiologically acceptable salts thereof.

4. (Twice Amended) The compound or salt of claim 3 wherein ~~[R2]~~ R^2 is hydrogen.

5. (Twice Amended) The compound or salt of claim 4 wherein R^7 , R^8 , R^9 and R^{10} are independently selected from the group consisting of hydrogen, alkyl, alkoxy, thioalkoxy, nitro, amino and ~~[N-amido]~~ $R^{12}C(=O)NR^{13}$.

13. (Twice Amended) The compound or salt of claim 12 wherein R^4 , R^5 and R^6 are independently selected from the groups consisting of hydrogen, alkyl, and $-C(=O)O-R''$ ~~[C-carboxy and a six member cycloalkyl ring formed by the combination of R4 and R5].~~

41. (Four times Amended) A method for synthesizing a compound of claim 1 comprising the step of reacting a first reactant with a second reactant in a solvent and in the presence of a base at elevated temperatures, wherein said first reactant has the structure set forth in formula 2



wherein

D, E, [~~F~~], F and G are independently selected from the group consisting of carbon and nitrogen wherein only one of D, E, F and G is nitrogen and the other of D, E, F, and G are carbon, and it is understood that when D, E, F or G is nitrogen, R⁷, R⁸, R⁹ and R¹⁰, respectively, do not exist and there is no bond;

R⁷, R⁸, R⁹ and R¹⁰ are independently selected from the group consisting of hydrogen, alkyl, trihaloalkyl, cycloalkyl, alkenyl, alkynyl, aryl, heteroaryl, heteroalicyclic, hydroxy, alkoxy, aryloxy, thiohydroxy, thioalkoxy, thioaryloxy, [~~sulfinyl, S-sulfonamido, N-Sulfonamido,~~ -S(=O)R¹², -S(=O)₂NR¹²R¹³, R¹²S(=O)₂NR¹³, trihalomethanesulfonyl, [~~carbonyl, N-amido,~~ -C(=O)-R¹², R¹²C(=O)NR¹³, -C(=O)O-R¹², R¹²C(=O)O-, -S(=O)₂R¹², -C(=O)NR¹²R¹³, cyano, nitro, halo, -OC(=O)NR¹²R¹³, R¹²OC(=O)NR¹³, -OC(=S)NR¹²R¹³, R¹²OC(=S)NR¹³, R¹²R¹³NC(=N)-, -R¹²NC(=N)NR¹³R¹⁴, -NR¹²C(=O)NR¹³R¹⁴, amino, and -NR¹²R¹³]; ~~wherein~~

~~R¹² is selected from the group consisting of hydrogen, alkyl, cycloalkyl, aryl, heteroaryl (bonded through a ring carbon) and heteroalicyclic (bonded through a ring carbon),~~ C(=O)NR¹²R¹³, and R¹²R¹³NC(=N) ~~wherein~~

~~R¹² and R¹³ are independently selected from the group consisting of hydrogen, alkyl, cycloalkyl, aryl, carbonyl, sulfonyl and combined, a five-six member heterocyclic ring containing at least one nitrogen, cyano, nitro, halo, O-carbamyl, N-carbamyl, O-thiocarbamyl, N-thiocarbamyl, guanyl, guanidino, ureido, amino, and~~ NR¹²R¹³, ~~wherein~~

~~R¹² and R¹³ are independently selected from the group consisting of hydrogen, alkyl, cycloalkyl, aryl, carbonyl, sulfonyl and,~~

~~combined, a five or six member heteroalicyclic ring containing at least one nitrogen; and,~~

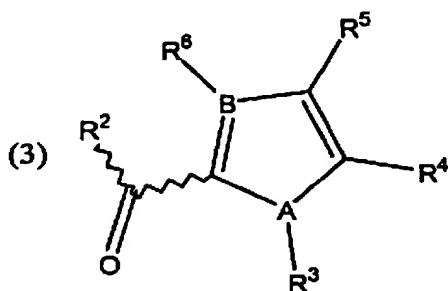
Z is selected from the group consisting of oxygen, sulfur and NR^{11} wherein, R^{11} is selected from the group consisting of hydrogen, alkyl, cycloalkyl, aryl, hydroxy, alkoxy, aryloxy, ~~[carbonyl, $-\text{C}(=\text{O})-\text{R}''$, [and] trihalomethanesulfonyl $-\text{C}(=\text{O})\text{O}-\text{R}''$, $\text{R}''\text{C}(=\text{O})\text{O}-$, $-\text{S}(=\text{O})_2\text{R}''$, $-\text{C}(=\text{O})\text{NR}^{12}\text{R}^{13}$, and $\text{R}^{12}\text{R}^{13}\text{NC}(=\text{N})-$; [wherein R'' is selected from the group consisting of hydrogen, alkyl, cycloalkyl, aryl, heteroaryl (bonded through a ring carbon) and heteroalicyclic (bonded through a ring carbon), and wherein R^{12} and R^{13} are independently selected from the group consisting of hydrogen, alkyl, cycloalkyl, aryl, carbonyl, sulfonyl and combined, a five six member heterocyclic ring containing at least one nitrogen; and]~~

R^1 is selected from the group consisting of hydrogen, alkyl, cycloalkyl, aryl, heteroaryl, heteroalicyclic, hydroxy, alkoxy, trihalomethanecarbonyl, and trihalomethanesulfonyl $-\text{C}(=\text{O})\text{O}-\text{R}''$, $\text{R}''\text{C}(=\text{O})\text{O}-$, $-\text{S}(=\text{O})_2\text{R}''$, $-\text{C}(=\text{O})\text{NR}^{12}\text{R}^{13}$, and $\text{R}^{12}\text{R}^{13}\text{NC}(=\text{N})-$ ~~[wherein~~

~~R'' is selected from the group consisting of hydrogen, alkyl, cycloalkyl, aryl, heteroaryl (bonded through a ring carbon) and heteroalicyclic (bonded through a ring carbon), $-\text{C}(=\text{O})\text{NR}^{12}\text{R}^{13}$, and $\text{R}^{12}\text{R}^{13}\text{NC}(=\text{N})$ wherein~~

~~R^{12} and R^{13} are independently selected from the group consisting of hydrogen, alkyl, cycloalkyl, aryl, carbonyl, sulfonyl and combined, a five six member heterocyclic ring containing at least one nitrogen;]~~

and wherein said second reactant is an acyl compound having the structure set forth in formula 3



wherein

A is selected from the group consisting of nitrogen, oxygen and sulfur and it is understood that when A is oxygen or sulfur, R^3 does not exist and there is no bond;

B is selected from the group consisting of carbon and nitrogen and it is understood that ~~[when B]~~ when B is nitrogen, R^6 does not exist and there is no bond;

R^2 is selected from the group consisting of hydrogen, alkyl, cycloalkyl, aryl and halogen;

when A is nitrogen, R^3 is selected from the group consisting of hydrogen, alkyl, cycloalkyl, aryl, hydroxy, alkoxy, aryloxy, ~~[carbonyl]~~ $-C(=O)-R''$, $-C(=O)O-R''$, $R''C(=O)O-$, $-S(=O)_2R''$, $-C(=O)NR^{12}R^{13}$, and $R^{12}R^{13}NC(=N)-$, ~~[wherein R'' is selected from the group consisting of hydrogen, alkyl, cycloalkyl, aryl, heteroaryl (bonded through a ring carbon) and heteroalicyclic (bonded through a ring carbon), and wherein R^{12} and R^{13} are independently selected from the group consisting of hydrogen, alkyl, cycloalkyl, aryl, carbonyl, sulfonyl, and combined, a five six member heterocyclic ring containing at least one nitrogen,]~~ and trihalomethanesulfonyl; and

R^4 , R^5 , and R^6 are independently selected from the group consisting of hydrogen, alkyl, trihaloalkyl, cycloalkyl, alkenyl, alkynyl, aryl, heteroaryl, heteroalicyclic, hydroxy, alkoxy, aryloxy, thiohydroxy, thioalkoxy, thioaryloxy, ~~[sulfinyl, S-sulfonamido, N-Sulfonamido,]~~ $-S(=O)R''$, $-S(=O)_2NR^{12}R^{13}$, $R^{12}S(=O)_2NR^{13}-$, trihalomethanesulfonyl, ~~[carbonyl, sulfonyl, N-amido,]~~ $-C(=O)-R''$, $-S(=O)_2-R''$, $R^{12}C(=O)NR^{13}$, cyano, nitro, halo, ~~[O-carbamyl, N-carbamyl, O-thiocarbamyl, N-thiocarbamyl,]~~ $-OC(=O)NR^{12}R^{13}$, $R^{12}OC(=O)NR^{13}-$, $-OC(=S)NR^{12}R^{13}$, $R^{12}OC(=S)NR^{13}-$, $-C(=O)O-R''$, $R''C(=O)O-$, $-S(=O)_2R''$ $-C(=O)NR^{12}R^{13}$, $R^{12}R^{13}NC(=N)-$, $-R^{12}NC(=N)NR^{13}R^{14}$, $-NR^{12}C(=O)R^{13}R^{14}$, amino, and $-NR^{12}R^{13}$;]

wherein R'' is selected from the group consisting of hydrogen, alkyl, cycloalkyl, aryl, heteroaryl (bonded through a ring carbon) and heteroalicyclic (bonded through a ring carbon) ;[$-C(=O)NR^{12}R^{13}$, and $R^{12}R^{13}NC(=N)-$],

and wherein R^{12} , R^{13} , and R^{14} are independently selected from the group consisting of hydrogen, alkyl, cycloalkyl, aryl, $-C(=O)-R''$, $-S(=O)_2R''$, and, combined, a five- or six-member heteroalicyclic ring containing at least one nitrogen.

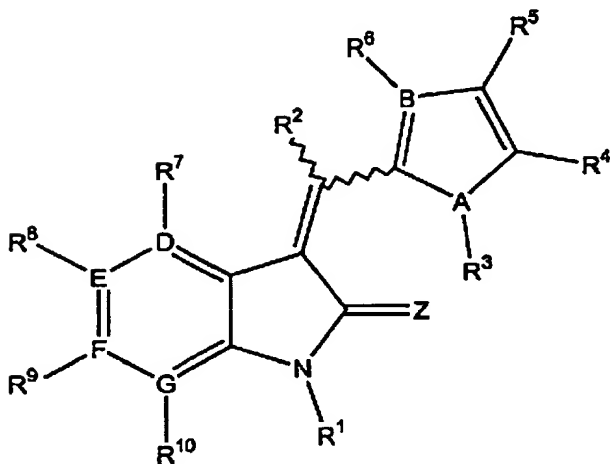
~~$[R^{12}$ and R^{13} are independently selected from the group consisting of hydrogen, alkyl, cycloalkyl, aryl, carbonyl, sulfonyl and combined, a five-six member heterocyclic ring containing at least one nitrogen, guanidino, ureido, amino and $-NR^{12}R^{13}$, wherein~~

~~R^{12} and R^{13} are independently selected from the group consisting of hydrogen, alkyl, cycloalkyl, aryl, carbonyl, sulfonyl and, combined, a five or six member heteroalicyclic ring containing at least one nitrogen; and,~~

~~R^4 and R^5 or R^5 and R^6 may combine to form a six member cycloalkyl, aryl, heteroaryl or heteroalicyclic ring.]~~

Pending Claims With Entry of this Amendment

1. (Four times amended) An azaindole compound having the following chemical structure:



wherein,

A is selected from the group consisting of nitrogen, oxygen and sulfur and it is understood that when A is oxygen or sulfur, R³ does not exist and there is no bond;

B, D, E, F and G are independently selected from the group consisting of carbon and nitrogen wherein only one of D, E, F and G is nitrogen and the other of D, E, F, and G are carbon, and it is understood that when B, D, E, F or G is nitrogen, R⁶, R⁷, R⁸, R⁹ and R¹⁰, respectively, do not exist and there is no bond;

Z is selected from the group consisting of oxygen, sulfur and NR¹¹ wherein, R¹¹ is selected from the group consisting of hydrogen, alkyl, cycloalkyl, aryl, hydroxy, alkoxy, aryloxy, -C(=O)-R'', -C(=O)O-R'', R''C(=O)O-, -S(=O)₂R'', -C(=O)NR¹²R¹³, R¹²R¹³NC(=N)-, and trihalomethanesulfonyl;

R¹ is selected from the group consisting of hydrogen, alkyl, cycloalkyl, aryl, heteroaryl, heteroalicyclic, hydroxy, alkoxy, trihalomethanecarbonyl, trihalomethanesulfonyl, -C(=O)O-R'', R''C(=O)O-, -S(=O)₂R'', -C(=O)NR¹²R¹³, and R¹²R¹³NC(=N)-;

R^2 is selected from the group consisting of hydrogen, alkyl, cycloalkyl, aryl and halogen;

when A is nitrogen, R^3 is selected from the group consisting of hydrogen, alkyl, cycloalkyl, aryl, hydroxy, alkoxy, aryloxy, $-C(=O)-R''$, $-C(=O)O-R''$, trihalomethanesulfonyl, $R''C(=O)O-$, $-S(=O)_2R''$, $-C(=O)NR^{12}R^{13}$, and $R^{12}R^{13}NC(=N)-$;

R^4 , R^5 , R^6 , R^7 , R^8 , R^9 and R^{10} are independently selected from the group consisting of hydrogen, alkyl, trihaloalkyl, cycloalkyl, alkenyl, alkynyl, aryl, heteroaryl, heteroalicyclic, hydroxy, alkoxy, aryloxy, thiohydroxy, thioalkoxy, $-R^{12}NC(=N)NR^{13}R^{14}$, thioaryloxy, $-S(=O)R''$, $-S(=O)_2NR^{12}R^{13}$, $R^{12}S(=O)_2NR^{13}-$, trihalomethanesulfonyl, $-C(=O)-R''$, $-C(=O)O-R''$, $R''C(=O)O-$, $-S(=O)_2R''$, $-C(=O)NR^{12}R^{13}$, cyano, nitro, halo, amino, $-OC(=O)NR^{12}R^{13}$, $R^{12}OC(=O)NR^{13}-$, $-OC(=S)NR^{12}R^{13}$, $R^{12}OC(=S)NR^{13}-$, $R^{12}R^{13}NC(=N)-$, $-NR^{12}C(=O)R^{13}R^{14}$, $R^{12}C(=O)NR^{13}-$, and $-NR^{12}R^{13}$;

wherein R'' is selected from the group consisting of hydrogen, alkyl, cycloalkyl, aryl, heteroaryl (bonded through a ring carbon) and heteroalicyclic (bonded through a ring carbon);

and wherein R^{12} , R^{13} , and R^{14} are independently selected from the group consisting of hydrogen, alkyl, cycloalkyl, aryl, $-C(=O)-R''$, $-S(=O)_2R''$, and combined, and a five or six membered heterocyclic ring containing at least one nitrogen;

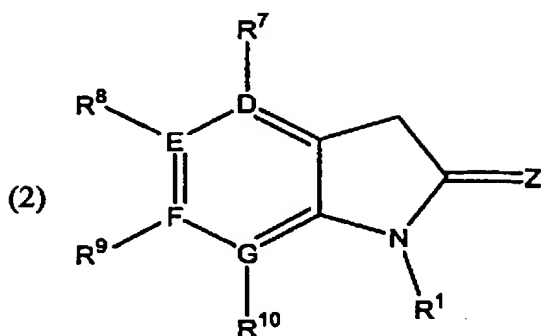
and the physiologically acceptable salts thereof.

2. (Once Amended) The compound or salt of claim 1 wherein R^1 is selected from the group consisting of hydrogen and alkyl.
3. (Once Amended) The compound or salt of claim 2 wherein Z is oxygen.
4. (Twice Amended) The compound or salt of claim 3 wherein R^2 is hydrogen.
5. (Twice Amended) The compound or salt of claim 4 wherein R^7 , R^8 , R^9 and R^{10} are independently selected from the group consisting of hydrogen, alkyl, alkoxy, thioalkoxy, nitro, amino and $R^{12}C(=O)NR^{13}-$.

6. (Once Amended) The compound or salt of claim 5 wherein D is nitrogen.
7. (Once Amended) The compound or salt of claim 5 wherein E is nitrogen.
8. (Once Amended) The compound or salt of claim 5 wherein F is nitrogen.
9. (Once Amended) The compound or salt of claim 5 wherein G is nitrogen.
11. (Once Amended) The compound or salt of claim 1 wherein A is nitrogen.
12. (Once Amended) The compound or salt of claim 11 wherein R³ is selected from the group consisting of hydrogen and alkyl.
13. (Twice Amended) The compound or salt of claim 12 wherein R⁴, R⁵ and R⁶ are independently selected from the groups consisting of hydrogen, alkyl, and -C(=O)O-R".
14. (Once Amended) The compound or salt of claim 12 wherein R⁴ and R⁶ are alkyl and R⁵ is hydrogen.
15. (Once Amended) The compound or salt of claim 1 wherein A is sulfur.
16. (Once Amended) The compound or salt of claim 15 wherein R⁴, R⁵ and R⁶ are heteroaryl, aryloxy, thioalkoxy, halo, nitro, trihalomethane-carbonyl and an aryl ring or a heteroaryl ring formed by the combination of R⁴ and R⁵.
18. A compound selected from the group consisting of
3-(3,5-dimethyl-1H-pyrrol-2ylmethylene)-1,3-dihydro-pyrrolo[2,3-b]pyridin-2-one,
3-(3,5-diethyl-1H-pyrrol-2-ylmethylene)-1,3-dihydro-pyrrolo[2,3-b]pyridin-2-one,
3-(3H-imidazol-4-ylmethylene)-1,3-dihydropyrrolo[2,3-b]pyridin-2-one,
3-[4-methyl-5-(2-oxo-1,2-dihydro-pyrrolo[2,3-b]pyridin-3-ylidenemethyl)-1H-pyrrol-3-yl]-
propionic acid,
and 3-[2,4-dimethyl-5-(2-oxo-1,2-dihydropyrrolo[2,3-b]pyridin-3-ylidenemethyl)-1H-pyrrol-
3-yl]-propionic acid.

19. (Twice Amended) A pharmacological composition of said compound or salt of claim 1.
20. (Twice Amended) A method for the modulation of the catalytic activity of a protein tyrosine kinase comprising administering said compound or salt of claim 1 to said protein tyrosine kinase.
21. (Once Amended) A method for treating a protein tyrosine kinase related disorder in an organism comprising administering a therapeutically effective amount of said pharmacological composition of claim 19 to said organism.
22. The method of claim 21 wherein said protein tyrosine kinase related disorder comprises a cell proliferation, differentiation or growth disorder.
23. The method of claim 22 wherein said cell proliferation, differentiation or growth disorder comprises a PDGF related disorder.
24. The method of claim 23 wherein said PDGF related disorder comprises cancer.
25. The method of claim 24 wherein said cancer comprises blastoglioma, Kaposi's sarcoma, melanoma, lung cancer, ovarian cancer or prostate cancer.
26. The method of claim 22 wherein said cell proliferation, differentiation or growth disorder comprises a EGF related disorder.
27. The method of claim 26 wherein said EGF related disorder comprises cancer.
28. The method of claim 27 wherein said cancer comprises squamous cell carcinoma, astrocytoma, glioblastoma, head and neck cancer, lung cancer and bladder cancer.
29. The method of claim 22 wherein said cell proliferation, differentiation or growth disorder comprises a IGF related disorder.

30. The method of claim 29 wherein said IGF related disorder comprise cancer.
31. The method of claim 30 wherein said cancer comprises breast cancer, small-cell lung cancer, and gliomas.
32. The method of claim 22 wherein said cell proliferation, differentiation or growth disorder comprises a met related disorder.
33. The method of claim 32 wherein said met related disorder comprises cancer.
34. The method of claim 33 wherein said cancer comprises colorectal cancer, thyroid cancer, pancreatic and gastric carcinoma, leukemia and lymphoma, Hodgkin's disease and Burkitts disease.
35. The method of claim 21 wherein protein tyrosine kinase related disorder comprises arthritis, diabetic retinopathy, restinosis, hepatic cirrhosis, atherosclerosis, angiogenesis, glomerulonephritis, diabetic nephropathy, thrombic microangiopathy syndromes, transplant rejection, autoimmune disease, diabetes or hyperimmune disorders.
36. The method of claim 21 wherein said organism is a mammal.
37. The method of claim 36 wherein said mammal is a human.
41. (Four times Amended) A method for synthesizing a compound of claim 1 comprising the step of reacting a first reactant with a second reactant in a solvent and in the presence of a base at elevated temperatures, wherein said first reactant has the structure set forth in formula 2



wherein

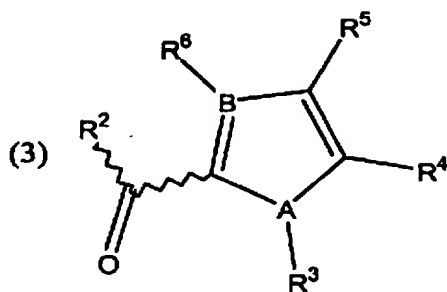
D, E, F and G are independently selected from the group consisting of carbon and nitrogen wherein only one of D, E, F and G is nitrogen and the other of D, E, F, and G are carbon, and it is understood that when D, E, F or G is nitrogen, R^7 , R^8 , R^9 and R^{10} , respectively, do not exist and there is no bond;

R^7 , R^8 , R^9 and R^{10} are independently selected from the group consisting of hydrogen, alkyl, trihaloalkyl, cycloalkyl, alkenyl, alkynyl, aryl, heteroaryl, heteroalicyclic, hydroxy, alkoxy, aryloxy, thiohydroxy, thioalkoxy, thioaryloxy, $-S(=O)R''$, $-S(=O)_2NR^{12}R^{13}$, $R^{12}S(=O)_2NR^{13}-$, trihalomethanesulfonyl, $-C(=O)-R''$, $R^{12}C(=O)NR^{13}-$, $-C(=O)O-R''$, $R''C(=O)O-$, $-S(=O)_2R''$, $-C(=O)NR^{12}R^{13}$, cyano, nitro, halo, $-OC(=O)NR^{12}R^{13}$, $R^{12}OC(=O)NR^{13}-$, $-OC(=S)NR^{12}R^{13}$, $R^{12}OC(=S)NR^{13}-$, $R^{12}R^{13}NC(=N)-$, $-R^{12}NC(=N)NR^{13}R^{14}$, $-NR^{12}C(=O)NR^{13}R^{14}$, amino, and $-NR^{12}R^{13}$;

Z is selected from the group consisting of oxygen, sulfur and NR^{11} wherein, R^{11} is selected from the group consisting of hydrogen, alkyl, cycloalkyl, aryl, hydroxy, alkoxy, aryloxy, $-C(=O)-R''$, trihalomethanesulfonyl $-C(=O)O-R''$, $R''C(=O)O-$, $-S(=O)_2R''$, $-C(=O)NR^{12}R^{13}$, and $R^{12}R^{13}NC(=N)-$;

R^1 is selected from the group consisting of hydrogen, alkyl, cycloalkyl, aryl, heteroaryl, heteroalicyclic, hydroxy, alkoxy, trihalomethanecarbonyl, and trihalomethanesulfonyl $-C(=O)O-R''$, $R''C(=O)O-$, $-S(=O)_2R''$, $-C(=O)NR^{12}R^{13}$, and $R^{12}R^{13}NC(=N)-$;

and wherein said second reactant is an acyl compound having the structure set forth in formula 3



wherein

A is selected from the group consisting of nitrogen, oxygen and sulfur and it is understood that when A is oxygen or sulfur, R^3 does not exist and there is no bond;

B is selected from the group consisting of carbon and nitrogen and it is understood that when B is nitrogen, R^6 does not exist and there is no bond;

R^2 is selected from the group consisting of hydrogen, alkyl, cycloalkyl, aryl and halogen;

when A is nitrogen, R^3 is selected from the group consisting of hydrogen, alkyl, cycloalkyl, aryl, hydroxy, alkoxy, aryloxy, $-C(=O)-R''$, $-C(=O)O-R''$, $R''C(=O)O-$, $-S(=O)_2R''$, $-C(=O)NR^{12}R^{13}$, and $R^{12}R^{13}NC(=N)-$, and trihalomethanesulfonyl; and

R^4 , R^5 , and R^6 are independently selected from the group consisting of hydrogen, alkyl, trihaloalkyl, cycloalkyl, alkenyl, alkynyl, aryl, heteroaryl, heteroalicyclic, hydroxy, alkoxy, aryloxy, thiohydroxy, thioalkoxy, thioaryloxy, $-S(=O)R''$, $-S(=O)_2NR^{12}R^{13}$, $R^{12}S(=O)_2NR^{13}$, trihalomethanesulfonyl, $-C(=O)-R''$, $-S(=O)_2-R''$, $R^{12}C(=O)NR^{13}$, cyano, nitro, halo, $-OC(=O)NR^{12}R^{13}$, $R^{12}OC(=O)NR^{13}$, $-OC(=S)NR^{12}R^{13}$, $R^{12}OC(=S)NR^{13}$, $-C(=O)O-R''$, $R''C(=O)O-$, $-S(=O)_2R''$, $-C(=O)NR^{12}R^{13}$, $R^{12}R^{13}NC(=N)-$, $-R^{12}NC(=N)NR^{13}R^{14}$, $-NR^{12}C(=O)R^{13}R^{14}$, amino and $-NR^{12}R^{13}$;

wherein R'' is selected from the group consisting of hydrogen, alkyl, cycloalkyl, aryl, heteroaryl (bonded through a ring carbon) and heteroalicyclic (bonded through a ring carbon);

and wherein R¹², R¹³, and R¹⁴ are independently selected from the group consisting of hydrogen, alkyl, cycloalkyl, aryl, -C(=O)-R'', -S(=O)₂R'', and, combined, a five- or six-member heteroalicyclic ring containing at least one nitrogen.

44. The method of claim 41, wherein said base is selected from the group consisting of a nitrogen base and an inorganic base.

45. The method of claim 41, wherein said solvent is selected from the group consisting of water, an alcohol, and dimethylformamide.

47. (New) A compound selected from the group consisting of:

3-(thien-2-methylidenyl)-4-aza-2-indolinone,
3-(1-methylpyrrol-2-methylidenyl)-4-aza-2-indolinone,
3-(2-methylthien-5-methylidenyl)-4-aza-2-indolinone,
3-(pyrrol-2-methylidenyl)-4-aza-2-indolinone,
3-(4-methylthien-2-methylidenyl)-4-aza-2-indolinone,
3-(2,4-dimethyl-3-ethoxycarbonylpyrrol-5-methylidenyl)-4-aza-2-indolinone,
3-[4-(2-methoxycarbonyl-ethyl)-3-methylpyrrol-2-methylidenyl]-4-aza-2-indolinone,
3-(2,4-dimethyl-3-ethylpyrrol-5-methylidenyl)-4-aza-2-indolinone,
3-(2-methylmercaptothien-5-methylidenyl)-4-aza-2-indolinone,
3-(2,3-dimethylthien-5-methylidenyl)-4-aza-2-indolinone,
3-(2-chlorothien-5-methylidenyl)-4-aza-2-indolinone,
3-(2,4-dimethylpyrrol-5-methylidenyl)-4-aza-2-indolinone,
3-(2-nitrothien-5-methylidenyl)-4-aza-2-indolinone,
3-(3-bromothien-2-methylidenyl)-4-aza-2-indolinone,
3-(2-carboxy-4-ethyl-3-methylpyrrol-5-methylidenyl)-4-aza-2-indolinone,
3-(3-ethoxycarbonyl-1,2,4-trimethylpyrrol-5-methylidenyl)-4-aza-2-indolinone,
3-(2-ethoxycarbonyl-4-methoxycarbonyl-3-methylpyrrol-5-methylidenyl)-4-aza-2-indolinone,
3-(3,4-dimethylpyrrol-2-methylidenyl)-4-aza-2-indolinone,
3-(2-ethylthien-5-methylidenyl)-4-aza-2-indolinone,
3-(2,4-diethylpyrrol-5-methylidenyl)-4-aza-2-indolinone,
3-(4-methylmercaptothien-2-methylidenyl)-4-aza-2-indolinone,
3-[2-trifluoro-1-(thien-2-yl)ethylidenyl]-4-aza-2-indolinone,

3-(2,4-diisopropylpyrrol-5-methylidenyl)-4-aza-2-indolinone,
3-(2,4-dimethylthien-5-methylidenyl)-4-aza-2-indolinone,
3-(2-ethyl-3-methylthien-5-methylidenyl)-4-aza-2-indolinone,
3-(2-isopropyl-3-methylthien-5-methylidenyl)-4-aza-2-indolinone,
3-(3-methyl-2-n-propylthien-5-methylidenyl)-4-aza-2-indolinone,
3-(2-n-butylthien-5-methylidenyl)-4-aza-2-indolinone,
3-(2-n-propylthien-5-methylidenyl)-4-aza-2-indolinone,
3-(4-acetyl-2-ethoxycarbonyl-3-methylpyrrol-5-methylidenyl)-4-aza-2-indolinone,
3-(4-methoxycarbonyl-3-methoxycarbonylmethyl-2-methylpyrrol-5-methylidenyl)-4-aza-2-indolinone,
3-[2-(2-carboxyethyl)-3-methylpyrrol-2-methylidenyl]-4-aza-2-indolinone,
3-(1-methylpyrrol-2-methylidenyl)-4-aza-5-methyl-2-indolinone,
3-(2-methylthien-5-methylidenyl)-4-aza-5-methyl-2-indolinone,
3-(pyrrol-2-methylidenyl)-4-aza-5-methyl-2-indolinone,
3-(4-methylthien-2-methylidenyl)-4-aza-5-methyl-2-indolinone,
3-(2,4-dimethyl-3-ethoxycarbonylpyrrol-5-methylidenyl)-4-aza-5-methyl-2-indolinone,
3-[4-(2-methoxycarbonyl-ethyl)-3-methylpyrrol-2-methylidenyl]-4-aza-5-methyl-2-indolinone,
3-(2,4-dimethyl-3-ethylpyrrol-5-methylidenyl)-4-aza-5-methyl-2-indolinone,
3-(2-methylmercaptothien-5-methylidenyl)-4-aza-5-methyl-2-indolinone,
3-(2,3-dimethylthien-5-methylidenyl)-4-aza-5-methyl-2-indolinone,
3-(2-chlorothien-5-methylidenyl)-4-aza-5-methyl-2-indolinone,
3-(2,4-dimethylpyrrol-5-methylidenyl)-4-aza-5-methyl-2-indolinone,
3-(2-nitrothien-5-methylidenyl)-4-aza-5-methyl-2-indolinone,
3-(3-bromothien-2-methylidenyl)-4-aza-5-methyl-2-indolinone,
3-(2-carboxy-4-ethyl-3-methylpyrrol-5-methylidenyl)-4-aza-5-methyl-2-indolinone,
3-(3-ethoxycarbonyl-1,2,4-trimethylpyrrol-5-methylidenyl)-4-aza-5-methyl-2-indolinone,
3-(2-ethoxycarbonyl-4-methoxycarbonyl-3-methylpyrrol-5-methylidenyl)-4-aza-5-methyl-2-indolinone,
3-(3,4-dimethylpyrrol-2-methylidenyl)-4-aza-5-methyl-2-indolinone,
3-(2-ethylthien-5-methylidenyl)-4-aza-5-methyl-2-indolinone,
3-(2,4-diethylpyrrol-5-methylidenyl)-4-aza-5-methyl-2-indolinone,
3-(4-methylmercaptothien-2-methylidenyl)-4-aza-5-methyl-2-indolinone,
3-[2-trifluoro-1-(thien-2-yl)ethylidenyl]-4-aza-5-methyl-2-indolinone,

3-(2,4-diisopropylpyrrol-5-methylidenyl)-4-aza-5-methyl-2-indolinone,
3-(2,4-dimethylthien-5-methylidenyl)-4-aza-5-methyl-2-indolinone,
3-(2-ethyl-3-methylthien-5-methylidenyl)-4-aza-5-methyl-2-indolinone,
3-(2-isopropyl-3-methylthien-5-methylidenyl)-4-aza-5-methyl-2-indolinone,
3-(3-methyl-2-n-propylthien-5-methylidenyl)-4-aza-5-methyl-2-indolinone,
3-(2-n-butylthien-5-methylidenyl)-4-aza-5-methyl-2-indolinone,
3-(2-n-propylthien-5-methylidenyl)-4-aza-5-methyl-2-indolinone,
3-(4-acetyl-2-ethoxycarbonyl-3-methylpyrrol-5-methylidenyl)-4-aza-5-methyl-2-indolinone,
3-(4-methoxycarbonyl-3-methoxycarbonylmethyl-2-methylpyrrol-5-methylidenyl)-4-aza-5-methyl-2-indolinone,
3-[2-[1-methyl-5-(trifluoromethyl)pyrrol-3-yl]thien-5-methylidenyl]-4-aza-5-methyl-2-indolinone,
3-[2-[1-methyl-3-(trifluoromethyl)pyrrol-5-yl]thien-5-methylidenyl]-4-aza-5-methyl-2-indolinone,
3-[2-(2-carboxyethyl)-3-methylpyrrol-2-methylidenyl]-4-aza-5-methyl-2-indolinone,
3-(thien-2-methylidenyl)-7-aza-5-nitro-2-indolinone,
3-(1-methylpyrrol-2-methylidenyl)-7-aza-5-nitro-2-indolinone,
3-(2-methylthien-5-methylidenyl)-7-aza-5-nitro-2-indolinone,
3-(pyrrol-2-methylidenyl)-7-aza-5-nitro-2-indolinone,
3-(4-methylthien-2-methylidenyl)-7-aza-5-nitro-2-indolinone,
3-(2,4-dimethyl-3-ethoxycarbonylpyrrol-5-methylidenyl)-7-aza-5-nitro-2-indolinone,
3-[4-(2-methoxycarbonyl-ethyl)-3-methylpyrrol-2-methylidenyl]-7-aza-5-nitro-2-indolinone,
3-(2,4-dimethyl-3-ethylpyrrol-5-methylidenyl)-7-aza-5-nitro-2-indolinone,
3-(2-methylmercaptothien-5-methylidenyl)-7-aza-5-nitro-2-indolinone,
3-(2,3-dimethylthien-5-methylidenyl)-7-aza-5-nitro-2-indolinone,
3-(2-chlorothien-5-methylidenyl)-7-aza-5-nitro-2-indolinone,
3-(2,4-dimethylpyrrol-5-methylidenyl)-7-aza-5-nitro-2-indolinone,
3-(2-nitrothien-5-methylidenyl)-7-aza-5-nitro-2-indolinone,
3-(2-carboxy-4-ethyl-3-methylpyrrol-5-methylidenyl)-7-aza-5-nitro-2-indolinone,
3-(3-ethoxycarbonyl-1,2,4-trimethylpyrrol-5-methylidenyl)-7-aza-5-nitro-2-indolinone,
3-(2-ethoxycarbonyl-4-methoxycarbonyl-3-methylpyrrol-5-methylidenyl)-7-aza-5-nitro-2-indolinone,
3-(3,4-dimethylpyrrol-2-methylidenyl)-7-aza-5-nitro-2-indolinone,
3-(2-ethylthien-5-methylidenyl)-7-aza-5-nitro-2-indolinone,

3-(2,4-diethylpyrrol-5-methylidenyl)-7-aza-5-nitro-2-indolinone,
3-(4-methylmercaptothien-2-methylidenyl)-7-aza-5-nitro-2-indolinone,
3-[2-trifluoro-1-(thien-2-yl)ethylidenyl]-7-aza-5-nitro-2-indolinone,
3-(2,4-diisopropylpyrrol-5-methylidenyl)-7-aza-5-nitro-2-indolinone,
3-(2,4-dimethylthien-5-methylidenyl)-7-aza-5-nitro-2-indolinone,
3-(3-bromothien-2-methylidenyl)-7-aza-5-nitro-2-indolinone,
3-(2-ethyl-3-methylthien-5-methylidenyl)-7-aza-5-nitro-2-indolinone,
3-(2-isopropyl-3-methylthien-5-methylidenyl)-7-aza-5-nitro-2-indolinone,
3-(3-methyl-2-n-propylthien-5-methylidenyl)-7-aza-5-nitro-2-indolinone,
3-(2-n-butylthien-5-methylidenyl)-7-aza-5-nitro-2-indolinone,
3-(2-n-propylthien-5-methylidenyl)-7-aza-5-nitro-2-indolinone,
3-(4-acetyl-2-ethoxycarbonyl-3-methylpyrrol-5-methylidenyl)-7-aza-5-nitro-2-indolinone,
3-(4-methoxycarbonyl-3-methoxycarbonylmethyl-2-methylpyrrol-5-methylidenyl)-7-aza-5-nitro-2-indolinone,
3-[2-[1-methyl-5-(trifluoromethyl)pyrrol-3-yl]thien-5-methylidenyl]-7-aza-5-nitro-2-indolinone,
3-[2-[1-methyl-3-(trifluoromethyl)pyrrol-5-yl]thien-5-methylidenyl]-7-aza-5-nitro-2-indolinone,
3-[2-(2-carboxyethyl)-3-methylpyrrol-2-methylidenyl]-7-aza-5-nitro-2-indolinone,
3-(thien-2-methylidenyl)-6-aza-2-indolinone, 3-(1-methylpyrrol-2-methylidenyl)-6-aza-2-indolinone,
3-(2-methylthien-5-methylidenyl)-6-aza-2-indolinone,
3-(pyrrol-2-methylidenyl)-6-aza-2-indolinone,
3-(4-methylthien-2-methylidenyl)-6-aza-2-indolinone,
3-(2,4-dimethyl-3-ethoxycarbonylpyrrol-5-methylidenyl)-6-aza-2-indolinone,
3-[4-(2-methoxycarbonyl)ethyl]-3-methylpyrrol-2-methylidenyl]-6-aza-2-indolinone,
3-(2,4-dimethyl-3-ethylpyrrol-5-methylidenyl)-6-aza-2-indolinone,
3-(2-methylmercaptothien-5-methylidenyl)-6-aza-2-indolinone,
3-(2,3-dimethylthien-5-methylidenyl)-6-aza-2-indolinone,
3-(2-chlorothien-5-methylidenyl)-6-aza-2-indolinone,
3-(2,4-dimethylpyrrol-5-methylidenyl)-6-aza-2-indolinone,
3-(2-nitrothien-5-methylidenyl)-6-aza-2-indolinone,
3-(3-bromothien-2-methylidenyl)-6-aza-2-indolinone,
3-(2-carboxy-4-ethyl-3-methylpyrrol-5-methylidenyl)-6-aza-2-indolinone,

3-(3-ethoxycarbonyl-1,2,4-trimethylpyrrol-5-methylidenyl)-6-aza-2-indolinone,
3-(2-ethoxycarbonyl-4-methoxycarbonyl-3-methylpyrrol-5-methylidenyl)-6-aza-2-indolinone,
3-(3,4-dimethylpyrrol-2-methylidenyl)-6-aza-2-indolinone,
3-(2-ethylthien-5-methylidenyl)-6-aza-2-indolinone,
3-(2,4-diethylpyrrol-5-methylidenyl)-6-aza-2-indolinone,
3-(4-methylmercaptathien-2-methylidenyl)-6-aza-2-indolinone,
3-[2-trifluoro-1-(thien-2-yl)ethylidenyl]-6-aza-2-indolinone,
3-(2,4-diisopropylpyrrol-5-methylidenyl)-6-aza-2-indolinone,
3-(2,4-dimethylthien-5-methylidenyl)-6-aza-2-indolinone,
3-(2-cyclopropyl-4-methylthien-5-methylidenyl)-6-aza-2-indolinone,
3-(2-ethyl-3-methylthien-5-methylidenyl)-6-aza-2-indolinone,
3-(2-isopropyl-3-methylthien-5-methylidenyl)-6-aza-2-indolinone,
3-(3-methyl-2-n-propylthien-5-methylidenyl)-6-aza-2-indolinone,
3-(2-n-butylthien-5-methylidenyl)-6-aza-2-indolinone,
3-(2-n-propylthien-5-methylidenyl)-6-aza-2-indolinone,
3-(4-acetyl-2-ethoxycarbonyl-3-methylpyrrol-5-methylidenyl)-6-aza-2-indolinone,
3-(4-methoxycarbonyl-3-methoxycarbonylmethyl-2-methylpyrrol-5-methylidenyl)-6-aza-2-indolinone,
3-[2-[1-methyl-5-(trifluoromethyl)pyrrol-3-yl]thien-5-methylidenyl]-6-aza-2-indolinone,
3-[2-[1-methyl-3-(trifluoromethyl)pyrrol-5-yl]thien-5-methylidenyl]-6-aza-2-indolinone,
3-[2-(2-carboxyethyl)-3-methylpyrrol-2-methylidenyl]-6-aza-2-indolinone,
3-(thien-2-methylidenyl)-5-aza-2-indolinone,
3-(1-methylpyrrol-2-methylidenyl)-5-aza-2-indolinone,
3-(2-methylthien-5-methylidenyl)-5-aza-2-indolinone,
3-(pyrrol-2-methylidenyl)-5-aza-2-indolinone,
3-(4-methylthien-2-methylidenyl)-5-aza-2-indolinone,
3-(2,4-dimethyl-3-ethoxycarbonylpyrrol-5-methylidenyl)-5-aza-2-indolinone,
3-[4-(2-methoxycarbonyl)ethyl]-3-methylpyrrol-2-methylidenyl]-5-aza-2-indolinone,
3-(2,4-dimethyl-3-ethylpyrrol-5-methylidenyl)-5-aza-2-indolinone,
3-(2-methylmercaptathien-5-methylidenyl)-5-aza-2-indolinone,
3-(2,3-dimethylthien-5-methylidenyl)-5-aza-2-indolinone,
3-(2-chlorothien-5-methylidenyl)-5-aza-2-indolinone,
3-(2,4-dimethylpyrrol-5-methylidenyl)-5-aza-2-indolinone,

3-(2-nitrothien-5-methylidenyl)-5-aza-2-indolinone,
3-(3-bromothien-2-methylidenyl)-5-aza-2-indolinone,
3-(2-carboxy-4-ethyl-3-methylpyrrol-5-methylidenyl)-5-aza-2-indolinone,
3-(3-ethoxycarbonyl-1,2,4-trimethylpyrrol-5-methylidenyl)-5-aza-2-indolinone,
3-(2-ethoxycarbonyl-4-methoxycarbonyl-3-methylpyrrol-5-methylidenyl)-5-aza-2-indolinone,
3-(3,4-dimethylpyrrol-2-methylidenyl)-5-aza-2-indolinone,
3-(2-ethylthien-5-methylidenyl)-5-aza-2-indolinone,
3-(2,4-diethylpyrrol-5-methylidenyl)-5-aza-2-indolinone,
3-(4-methylmercaptothien-2-methylidenyl)-5-aza-2-indolinone,
3-[2-trifluoro-1-(thien-2-yl)ethylidenyl]-5-aza-2-indolinone,
3-(2,4-diisopropylpyrrol-5-methylidenyl)-5-aza-2-indolinone,
3-(2,4-dimethylthien-5-methylidenyl)-5-aza-2-indolinone,
3-(2-cyclopropyl-4-methylthien-5-methylidenyl)-5-aza-2-indolinone,
3-(2-ethyl-3-methylthien-5-methylidenyl)-5-aza-2-indolinone,
3-(2-isopropyl-3-methylthien-5-methylidenyl)-5-aza-2-indolinone,
3-(3-methyl-2-n-propylthien-5-methylidenyl)-5-aza-2-indolinone,
3-(2-n-butylthien-5-methylidenyl)-5-aza-2-indolinone,
3-(2-n-propylthien-5-methylidenyl)-5-aza-2-indolinone,
3-(4-acetyl-2-ethoxycarbonyl-3-methylpyrrol-5-methylidenyl)-5-aza-2-indolinone,
3-(4-methoxycarbonyl-3-methoxycarbonylmethyl-2-methylpyrrol-5-methylidenyl)-5-aza-2-indolinone,
3-[4-(4-)-1-methylpyrrol-2-methylidenyl]-5-aza-2-indolinone,
3-[2-[1-methyl-5-(trifluoromethyl)pyrrol-3-yl]thien-5-methylidenyl]-5-aza-2-indolinone,
3-[2-[1-methyl-3-(trifluoromethyl)pyrrol-5-yl]thien-5-methylidenyl]-5-aza-2-indolinone,
3-[2-(2-carboxyethyl)-3-methylpyrrol-2-methylidenyl]-5-aza-2-indolinone,
3-(thien-2-methylidenyl)-7-aza-6-methyl-5-(pyrid-4-yl)-2-indolinone,
3-(1-methylpyrrol-2-methylidenyl)-7-aza-6-methyl-5-(pyrid-4-yl)-2-indolinone,
3-(2-methylthien-5-methylidenyl)-7-aza-6-methyl-5-(pyrid-4-yl)-2-indolinone,
3-(pyrrol-2-methylidenyl)-7-aza-6-methyl-5-(pyrid-4-yl)-2-indolinone,
3-(4-methylthien-2-methylidenyl)-7-aza-6-methyl-5-(pyrid-4-yl)-2-indolinone,
3-(2,4-dimethyl-3-ethoxycarbonylpyrrol-5-methylidenyl)-7-aza-6-methyl-5-(pyrid-4-yl)-2-indolinone,

3-[4-(2-methoxycarbonylethyl)-3-methylpyrrol-2-methylidenyl]-7-aza-6-methyl-5-(pyrid-4-yl)-2-indolinone,
3-(2,4-dimethyl-3-ethylpyrrol-5-methylidenyl)-7-aza-6-methyl-5-(pyrid-4-yl)-2-indolinone,
3-(2-methylmercaptathien-5-methylidenyl)-7-aza-6-methyl-5-(pyrid-4-yl)-2-indolinone,
3-(2,3-dimethylthien-5-methylidenyl)-7-aza-6-methyl-5-(pyrid-4-yl)-2-indolinone,
3-(2-chlorothien-5-methylidenyl)-7-aza-6-methyl-5-(pyrid-4-yl)-2-indolinone,
3-(2,4-dimethylpyrrol-5-methylidenyl)-7-aza-6-methyl-5-(pyrid-4-yl)-2-indolinone,
3-(2-nitrothien-5-methylidenyl)-7-aza-6-methyl-5-(pyrid-4-yl)-2-indolinone,
3-(3-bromothien-2-methylidenyl)-7-aza-6-methyl-5-(pyrid-4-yl)-2-indolinone,
3-(2-carboxy-4-ethyl-3-methylpyrrol-5-methylidenyl)-7-aza-6-methyl-5-(pyrid-4-yl)-2-indolinone,
3-(3-ethoxycarbonyl-1,2,4-trimethylpyrrol-5-methylidenyl)-7-aza-6-methyl-5-(pyrid-4-yl)-2-indolinone,
3-(2-ethoxycarbonyl-4-methoxycarbonyl-3-methylpyrrol-5-methylidenyl)-7-aza-6-methyl-5-(pyrid-4-yl)-2-indolinone,
3-(3,4-dimethylpyrrol-2-methylidenyl)-7-aza-6-methyl-5-(pyrid-4-yl)-2-indolinone,
3-(2-ethylthien-5-methylidenyl)-7-aza-6-methyl-5-(pyrid-4-yl)-2-indolinone,
3-(2,4-diethylpyrrol-5-methylidenyl)-7-aza-6-methyl-5-(pyrid-4-yl)-2-indolinone,
3-(4-methylmercaptathien-2-methylidenyl)-7-aza-6-methyl-5-(pyrid-4-yl)-2-indolinone,
3-[2-trifluoro-1-(thien-2-yl)ethylidenyl]-7-aza-6-methyl-5-(pyrid-4-yl)-2-indolinone,
3-(2,4-diisopropylpyrrol-5-methylidenyl)-7-aza-6-methyl-5-(pyrid-4-yl)-2-indolinone,
3-(2,4-dimethylthien-5-methylidenyl)-7-aza-6-methyl-5-(pyrid-4-yl)-2-indolinone,
3-(2-cyclopropyl-4-methylthien-5-methylidenyl)-7-aza-6-methyl-5-(pyrid-4-yl)-2-indolinone,
3-(2-ethyl-3-methylthien-5-methylidenyl)-7-aza-6-methyl-5-(pyrid-4-yl)-2-indolinone,
3-(2-isopropyl-3-methylthien-5-methylidenyl)-7-aza-6-methyl-5-(pyrid-4-yl)-2-indolinone,
3-(3-methyl-2-n-propylthien-5-methylidenyl)-7-aza-6-methyl-5-(pyrid-4-yl)-2-indolinone,
3-(2-n-butylthien-5-methylidenyl)-7-aza-6-methyl-5-(pyrid-4-yl)-2-indolinone,
3-(2-n-propylthien-5-methylidenyl)-7-aza-6-methyl-5-(pyrid-4-yl)-2-indolinone,
3-(4-acetyl-2-ethoxycarbonyl-3-methylpyrrol-5-methylidenyl)-7-aza-6-methyl-5-(pyrid-4-yl)-2-indolinone,
3-(4-methoxycarbonyl-3-methoxycarbonylmethyl-2-methylpyrrol-5-methylidenyl)-7-aza-6-methyl-5-(pyrid-4-yl)-2-indolinone,
3-[2-[1-methyl-5-(trifluoromethyl)pyrrol-3-yl]thien-5-methylidenyl]-7-aza-6-methyl-5-(pyrid-4-yl)-2-indolinone,

3-[2-[1-methyl-3-(trifluoromethyl)pyrrol-5-yl]thien-5-methylidenyl]-7-aza-6-methyl-5-(pyrid-4-yl)-2-indolinone,
3-[2-(2-carboxyethyl)-3-methylpyrrol-2-methylidenyl]-7-aza-6-methyl-5-(pyrid-4-yl)-2-indolinone,
3-(thien-2-methylidenyl)-5-amino-7-aza-2-indolinone, 3-(1-methylpyrrol-2-methylidenyl)-5-amino-7-aza-2-indolinone,
3-(2-methylthien-5-methylidenyl)-5-amino-7-aza-2-indolinone, 3-(pyrrol-2-methylidenyl)-5-amino-7-aza-2-indolinone,
3-(4-methylthien-2-methylidenyl)-5-amino-7-aza-2-indolinone,
3-(2,4-dimethyl-3-ethoxycarbonylpyrrol-5-methylidenyl)-5-amino-7-aza-2-indolinone,
3-[4-(2-methoxycarbonyl)ethyl]-3-methylpyrrol-2-methylidenyl]-5-amino-7-aza-2-indolinone,
3-(2,4-dimethyl-3-ethylpyrrol-5-methylidenyl)-5-amino-7-aza-2-indolinone,
3-(2-methylmercaptothien-5-methylidenyl)-5-amino-7-aza-2-indolinone,
3-(2,3-dimethylthien-5-methylidenyl)-5-amino-7-aza-2-indolinone,
3-(2-chlorothien-5-methylidenyl)-5-amino-7-aza-2-indolinone,
3-(2,4-dimethylpyrrol-5-methylidenyl)-5-amino-7-aza-2-indolinone,
3-(2-nitrothien-5-methylidenyl)-5-amino-7-aza-2-indolinone,
3-(3-bromothien-2-methylidenyl)-5-amino-7-aza-2-indolinone,
3-(2-carboxy-4-ethyl-3-methylpyrrol-5-methylidenyl)-5-amino-7-aza-2-indolinone,
3-(3-ethoxycarbonyl-1,2,4-trimethylpyrrol-5-methylidenyl)-5-amino-7-aza-2-indolinone,
3-(2-ethoxycarbonyl-4-methoxycarbonyl-3-methylpyrrol-5-methylidenyl)-5-amino-7-aza-2-indolinone, 3-(3,4-dimethylpyrrol-2-methylidenyl)-5-amino-7-aza-2-indolinone,
3-(2-ethylthien-5-methylidenyl)-5-amino-7-aza-2-indolinone, 3-(2,4-diethylpyrrol-5-methylidenyl)-5-amino-7-aza-2-indolinone,
3-(4-methylmercaptothien-2-methylidenyl)-5-amino-7-aza-2-indolinone,
3-[2-trifluoro-1-(thien-2-yl)ethylidenyl]-5-amino-7-aza-2-indolinone,
3-(2,4-diisopropylpyrrol-5-methylidenyl)-5-amino-7-aza-2-indolinone,
3-(2,4-dimethylthien-5-methylidenyl)-5-amino-7-aza-2-indolinone,
3-(2-cyclopropyl-4-methylthien-5-methylidenyl)-5-amino-7-aza-2-indolinone,
3-(2-ethyl-3-methylthien-5-methylidenyl)-5-amino-7-aza-2-indolinone,
3-(2-isopropyl-3-methylthien-5-methylidenyl)-5-amino-7-aza-2-indolinone,
3-(3-methyl-2-n-propylthien-5-methylidenyl)-5-amino-7-aza-2-indolinone,
3-(2-n-butylthien-5-methylidenyl)-5-amino-7-aza-2-indolinone,
3-(2-n-propylthien-5-methylidenyl)-5-amino-7-aza-2-indolinone,

3-(4-acetyl-2-ethoxycarbonyl-3-methylpyrrol-5-methylidenyl)-5-amino-7-aza-2-indolinone,
3-(4-methoxycarbonyl-3-methoxycarbonylmethyl-2-methylpyrrol-5-methylidenyl)-5-amino-7-aza-2-indolinone,
3-[2-[1-methyl-5-(trifluoromethyl)pyrrol-3-yl]thien-5-methylidenyl]-5-amino-7-aza-2-indolinone,
3-[2-[1-methyl-3-(trifluoromethyl)pyrrol-5-yl]thien-5-methylidenyl]-5-amino-7-aza-2-indolinone,
3-[2-(2-carboxyethyl)-3-methylpyrrol-2-methylidenyl]-5-amino-7-aza-2-indolinone,
3-(thien-2-methylidenyl)-5-acetamido-7-aza-2-indolinone,
3-(1-methylpyrrol-2-methylidenyl)-5-acetamido-7-aza-2-indolinone,
3-(2-methylthien-5-methylidenyl)-5-acetamido-7-aza-2-indolinone,
3-(pyrrol-2-methylidenyl)-5-acetamido-7-aza-2-indolinone,
3-(4-methylthien-2-methylidenyl)-5-acetamido-7-aza-2-indolinone,
3-(2,4-dimethyl-3-ethoxycarbonylpyrrol-5-methylidenyl)-5-acetamido-7-aza-2-indolinone,
3-[4-(2-methoxycarbonyl-ethyl)-3-methylpyrrol-2-methylidenyl]-5-acetamido-7-aza-2-indolinone,
3-(2,4-dimethyl-3-ethylpyrrol-5-methylidenyl)-5-acetamido-7-aza-2-indolinone,
3-(2-methylmercaptothien-5-methylidenyl)-5-acetamido-7-aza-2-indolinone,
3-(2,3-dimethylthien-5-methylidenyl)-5-acetamido-7-aza-2-indolinone,
3-(2-chlorothien-5-methylidenyl)-5-acetamido-7-aza-2-indolinone,
3-(2,4-dimethylpyrrol-5-methylidenyl)-5-acetamido-7-aza-2-indolinone,
3-(2-nitrothien-5-methylidenyl)-5-acetamido-7-aza-2-indolinone,
3-(3-bromothien-2-methylidenyl)-5-acetamido-7-aza-2-indolinone,
3-(2-carboxy-4-ethyl-3-methylpyrrol-5-methylidenyl)-5-acetamido-7-aza-2-indolinone,
3-(3-ethoxycarbonyl-1,2,4-trimethylpyrrol-5-methylidenyl)-5-acetamido-7-aza-2-indolinone,
3-(2-ethoxycarbonyl-4-methoxycarbonyl-3-methylpyrrol-5-methylidenyl)-5-acetamido-7-aza-2-indolinone,
3-(3,4-dimethylpyrrol-2-methylidenyl)-5-acetamido-7-aza-2-indolinone,
3-(2-ethylthien-5-methylidenyl)-5-acetamido-7-aza-2-indolinone,
3-(2,4-diethylpyrrol-5-methylidenyl)-5-acetamido-7-aza-2-indolinone,
3-(4-methylmercaptothien-2-methylidenyl)-5-acetamido-7-aza-2-indolinone,
3-[2-trifluoro-1-(thien-2-yl)ethylidenyl]-5-acetamido-7-aza-2-indolinone,
3-(2,4-diisopropylpyrrol-5-methylidenyl)-5-acetamido-7-aza-2-indolinone,
3-(2,4-dimethylthien-5-methylidenyl)-5-acetamido-7-aza-2-indolinone,

3-(2-ethyl-3-methylthien-5-methylidenyl)-5-acetamido-7-aza-2-indolinone,
3-(2-isopropyl-3-methylthien-5-methylidenyl)-5-acetamido-7-aza-2-indolinone,
3-(3-methyl-2-n-propylthien-5-methylidenyl)-5-acetamido-7-aza-2-indolinone, 3-(2-n-butylthien-5-methylidenyl)-5-acetamido-7-aza-2-indolinone,
3-(2-n-propylthien-5-methylidenyl)-5-acetamido-7-aza-2-indolinone,
3-(4-acetyl-2-ethoxycarbonyl-3-methylpyrrol-5-methylidenyl)-5-acetamido-7-aza-2-indolinone, 3-(4-methoxycarbonyl-3-methoxycarbonylmethyl-2-methylpyrrol-5-methylidenyl)-5-acetamido-7-aza-2-indolinone,
3-[2-[1-methyl-5-(trifluoromethyl)pyrrol-3-yl]thien-5-methylidenyl]-5-acetamido-7-aza-2-indolinone,
3-[2-[1-methyl-3-(trifluoromethyl)pyrrol-5-yl]thien-5-methylidenyl]-5-acetamido-7-aza-2-indolinone,
3-[2-(2-carboxyethyl)-3-methylpyrrol-2-methylidenyl]-5-acetamido-7-aza-2-indolinone
3-(2-phenylthien-5-methylidenyl)-4-aza-5-methyl-2-indolinone,
3-(2-phenylthien-5-methylidenyl)-7-aza-5-nitro-2-indolinone,
3-(2-phenylthien-5-methylidenyl)-6-aza-2-indolinone,
3-(2-phenylthien-5-methylidenyl)-5-aza-2-indolinone,
3-(2-phenylthien-5-methylidenyl)-7-aza-6-methyl-5-(pyrid-4-yl)-2-indolinone,
3-(2-phenylthien-5-methylidenyl)-5-amino-7-aza-2-indolinone,
3-(2-phenylthien-5-methylidenyl)-5-acetamido-7-aza-2-indolinone,
3-(3-phenoxythien-2-methylidenyl)-4-aza-5-methyl-2-indolinone,
3-(3-phenoxythien-2-methylidenyl)-7-aza-5-nitro-2-indolinone,
3-(3-phenoxythien-2-methylidenyl)-6-aza-2-indolinone,
3-(3-phenoxythien-2-methylidenyl)-5-aza-2-indolinone,
3-(3-phenoxythien-2-methylidenyl)-7-aza-6-methyl-5-(pyrid-4-yl)-2-indolinone,
3-(3-phenoxythien-2-methylidenyl)-5-amino-7-aza-2-indolinone,
3-(3-phenoxythien-2-methylidenyl)-4-aza-2-indolinone,
3-(3-phenoxythien-2-methylidenyl)-5-acetamido-7-aza-2-indolinone,
3-[2-[1-methyl-5-(trifluoromethyl)pyrrol-3-yl]thien-5-methylidenyl]-4-aza-2-indolinone,
3-[2-[1-methyl-5-(trifluoromethyl)pyrrol-3-yl]thien-5-methylidenyl]-4-aza-2-indolinone,
3-[2-[1-methyl-3-(trifluoromethyl)pyrrol-5-yl]thien-5-methylidenyl]-4-aza-2-indolinone,
3-(2-cyclopropyl-4-methylthien-5-methylidenyl)-7-aza-5-nitro-2-indolinone,
3-(2-cyclopropyl-4-methylthien-5-methylidenyl)-4-aza-5-methyl-2-indolinone,
3-(2-cyclopropyl-4-methylthien-5-methylidenyl)-4-aza-2-indolinone,

3-(2-cyclopropyl-4-methylthien-5-methylidenyl)-5-acetamido-7-aza-2-indolinone,
3-(2-cyclohexyl-3-methylthien-5-methylidenyl)-4-aza-5-methyl-2-indolinone,
3-(2-cyclohexyl-3-methylthien-5-methylidenyl)-7-aza-5-nitro-2-indolinone,
3-(2-cyclohexyl-3-methylthien-5-methylidenyl)-4-aza-2-indolinone,
3-(2-cyclohexyl-3-methylthien-5-methylidenyl)-6-aza-2-indolinone,
3-(2-cyclohexyl-3-methylthien-5-methylidenyl)-5-aza-2-indolinone,
3-(2-cyclohexyl-3-methylthien-5-methylidenyl)-7-aza-6-methyl-5-(pyrid-4-yl)-2-indolinone,
3-(2-cyclohexyl-3-methylthien-5-methylidenyl)-5-amino-7-aza-2-indolinone,
3-(2-cyclohexyl-3-methylthien-5-methylidenyl)-5-acetamido-7-aza-2-indolinone,
3-[4-(4-chlorobenzoyl)-1-methylpyrrol-2-methylidenyl]-4-aza-2-indolinone,
3-[4-(4-chlorobenzoyl)-1-methylpyrrol-2-methylidenyl]-7-aza-6-methyl-5-(pyrid-4-yl)-2-indolinone,
3-[4-(4-chlorobenzoyl)-1-methylpyrrol-2-methylidenyl]-5-amino-7-aza-2-indolinone,
3-[4-(4-chlorobenzoyl)-1-methylpyrrol-2-methylidenyl]-5-acetamido-7-aza-2-indolinone,
3-[4-(4-chlorobenzoyl)-1-methylpyrrol-2-methylidenyl]-7-aza-5-nitro-2-indolinone,
3-[4-(4-chlorobenzoyl)-1-methylpyrrol-2-methylidenyl]-6-aza-2-indolinone,
3-(2-benzyl-4-methylthien-5-methylidenyl)-5-amino-7-aza-2-indolinone,
3-(2-benzyl-4-methylthien-5-methylidenyl)-5-acetamido-7-aza-2-indolinone,
3-(2-benzyl-4-methylthien-5-methylidenyl)-4-aza-2-indolinone,
3-(2-benzyl-4-methylthien-5-methylidenyl)-7-aza-5-nitro-2-indolinone,
3-(2-benzyl-4-methylthien-5-methylidenyl)-6-aza-2-indolinone,
3-(2-benzyl-4-methylthien-5-methylidenyl)-7-aza-6-methyl-5-(pyrid-4-yl)-2-indolinone,
3-(2-benzyl-4-methylthien-5-methylidenyl)-4-aza-5-methyl-2-indolinone,
3-(2-benzyl-4-methylthien-5-methylidenyl)-5-aza-2-indolinone,
3-(4-phenylethynylthien-2-methylidenyl)-4-aza-5-methyl-2-indolinone,
3-(4-phenylethynylthien-2-methylidenyl)-7-aza-6-methyl-5-(pyrid-4-yl)-2-indolinone,
3-(4-phenylethynylthien-2-methylidenyl)-4-aza-2-indolinone,
3-(4-phenylethynylthien-2-methylidenyl)-5-amino-7-aza-2-indolinone,
3-(4-phenylethynylthien-2-methylidenyl)-5-acetamido-7-aza-2-indolinone,
3-(4-phenylethynylthien-2-methylidenyl)-7-aza-5-nitro-2-indolinone,
3-(4-phenylethynylthien-2-methylidenyl)-6-aza-2-indolinone,
3-(4-phenylethynylthien-2-methylidenyl)-5-aza-2-indolinone,
3-(2-phenylethynylthien-5-methylidenyl)-6-aza-2-indolinone,
3-(2-phenylethynylthien-5-methylidenyl)-5-aza-2-indolinone,

3-(2-phenylethynylthien-5-methylidenyl)-7-aza-6-methyl-5-(pyrid-4-yl)-2-indolinone,
3-(2-phenylethynylthien-5-methylidenyl)-5-amino-7-aza-2-indolinone,
3-(2-phenylethynylthien-5-methylidenyl)-5-acetamido-7-aza-2-indolinone,
3-(2-phenylethynylthien-5-methylidenyl)-7-aza-5-nitro-2-indolinone,
3-(2-phenylethynylthien-5-methylidenyl)-4-aza-2-indolinone,
3-(2-phenylethynylthien-5-methylidenyl)-4-aza-5-methyl-2-indolinone, and
3-(2-phenylthien-5-methylidenyl)-4-aza-2-indolinone.